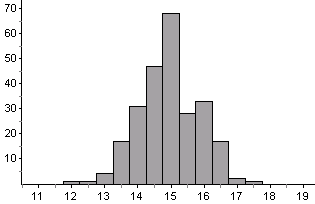
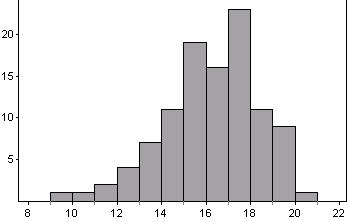
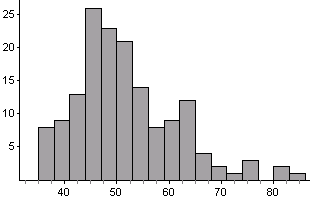
Stat and Data Analysis Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.2 CW Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

1. Adult female Dalmatians weigh an average of 50 pounds with a standard deviation of 3.3 pounds. Adult female Boxers weigh an average of 57.5 pounds with a standard deviation of 1.7 pounds. One statistics teacher owns an underweight Dalmatian and an underweight Boxer. The Dalmatian weighs 45 pounds, and the Boxer weighs 52 pounds. Which dog is more underweight? Explain.
2. For each graph sketch a density curve overtop of it and decide on the shape. **Mark on the graph where you would estimate the mean and median would be**, and then write the values below.

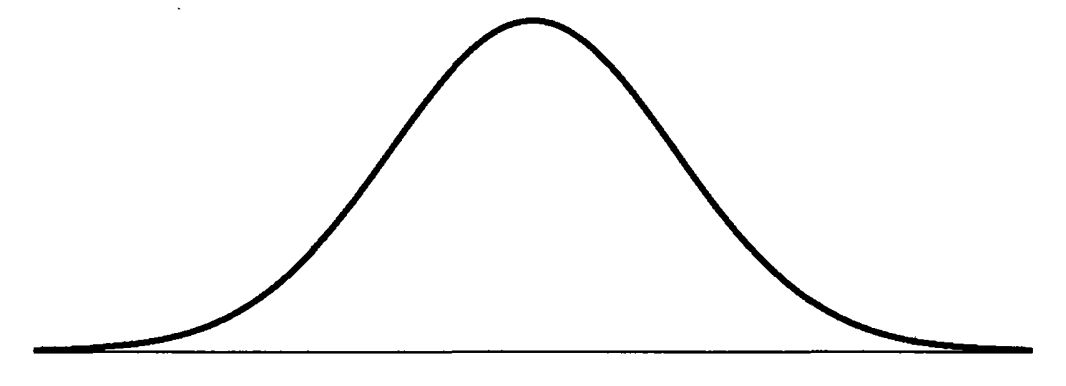
 

Shape: Shape: Shape:

Mean: Mean: Mean:

Median: Median: Median:

1. A uniform density curve is drawn over the interval from (0, 6).
   1. Draw the curve below. Be sure to mark the appropriate height
   2. What is the mean? The median?
   3. What percent of observations are below 2.7?
   4. What percent of observations are above 5.2?
   5. What percent of observations are between 1.9 and 4.1?
2. Adult hens lay eggs that have an average weight of 67.1 grams with a standard deviation of 3.1 grams. The weights follow a normal model.
3. Draw and clearly label this model.



1. What percent of eggs weight more than 72 grams?
2. What percent of eggs weight between 63 and 68 grams?
3. What percent of eggs weight less than 65 grams?
4. What weight would correspond to the highest 10% of eggs?
5. What weight would be the 83rd percentile?
6. The middle 70% of all eggs fall between what two weights?
7. What is the IQR of egg weights?
8. What would the mean be for a distribution that has 11% below 33 and a standard deviation of 2.4?